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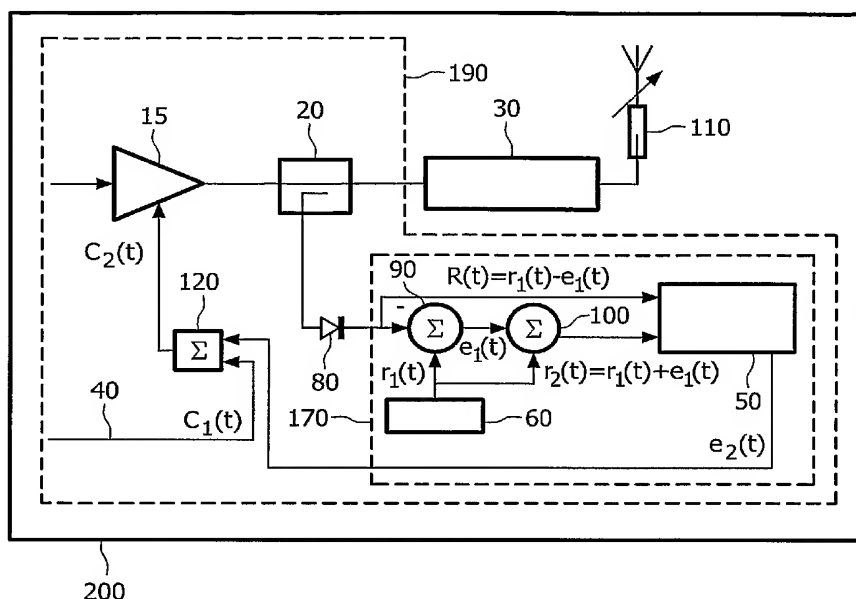
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(54) Title: **LOAD INSENSITIVE POWER AMPLIFIER**



(57) Abstract: A power amplifier for mobile phones has an RF amplifier (15) controlled based on an integral over time of a signal representing an amount of power reflected from a load on an output of the amplifier. Using an integral, the control can be more effective where there are changeable load impedances. It can restrict large voltage swings on the amplifier output. As the integral can be determined using analogue signal processing components (50, 90, 100) it can be integrated more easily with RF and other components. The integral can be determined of a difference relative to a reference. The reflection signal can be centred on zero before integrating to reduce sensitivity to offset. The reference can be selectable to suit the conditions.

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